INTELLOFAX 11

CLASSIFICATION ~~SECRET/CONTROL - U.S. OFFICIALS ONLY~~ 50X1-HUM

SECURITY INFORMATION

CENTRAL INTELLIGENCE AGENCY

REPORT

INFORMATION REPORT

CD NO.

COUNTRY	Germany (Russian Zone)	DATE DISTR	3 December 1951
SUBJECT	Meetings of the Special Commission on Radio Tubes held 20 April and 21 June 1951	NO. OF PAGES	3
PLACE ACQUIRED		NO. OF ENCLS (LISTED BELOW)	
DATE OF INFO.		SUPPLEMENT TO REPORT NO	

50X1-HUM

The following matters were among those discussed at the two meetings of the Special Commission for Radio Tubes (Fako IV G - Elektronenröhren) held on 20 April and 21 June, 1951.

Meeting on 20 April.

1. In view of the difficulty of obtaining vacuum pumps for tube producing machines, a representative of the firm Deutsche Vacuumapparate, Dreyer und Holland-Mertens, Sangershausen, had been invited to address the Commission. It appeared from his speech that the pumps made by the firm would be suitable only for preliminary evacuation (e.g. possible as a "Sammelvorpumpe" in the manufacture of television tubes), since the pumps were too large and the vacuum attained (2.10^{-4})(1) was not high enough for final evacuation. In any case, reparation orders absorbed practically the whole output of the factory. Shortage of materials, especially centrifugal castings and nickel cylinders caused difficulties in production. The standard line of the factory appeared to be a 4.5 m^3(2) Duplex-pump, producing a vacuum of 10^{-4}(1) at 900-1400 RPM. Erfurt(3) had asked them to supply diffusion pumps producing a vacuum of 10^{-6}, and one producing a vacuum of 10^{-5} had been successfully designed. Production was held up by the shortage of stainless (Nirosta) steel.

2. Representatives of the various factories reported the following statistics on tubes rejected in the final tests.

	Jan	Feb	March
Werk IIF(4)	15%	12%	30%

(The rise in March was due to the commencement of a series production of new tubes for the T.2. Leningrad television receivers).

Neuhaus(5)	-	43.7%	36.8%

(90% of the E.E.C. rectifiers had to be rejected).

CONFIDENTIAL

CLASSIFICATION ~~SECRET/CONTROL - U.S. OFFICIALS ONLY~~ 50X1-HUM

STATE	NAVY	NSA	DISTRIBUTION		
AIR	FBI	ORR Ev			

Document No. 08
No Change In Class.
Declassified
Class. Changed To: TS S C
Auth.: HR 70-2
Date: 05/09/78

	Jan	Feb	March
Phonetika-Radio, Berlin	-	32.5%	43%
Erfurt	-	40.3%	38.8%

These rejections were said to be largely due to the poor quality of the tungsten wire supplied by the Berliner Glühlampenwerk (VEB) and the Werk HF .

3. Pure iron supplied by the Maxhütte, Unterwellenborn, and rolled in Hettstedt (6), was of variable quality. Only 50% of the iron received by the Werk HF proved suitable for use in tubes.

4. Prof. Dr. (fnu) Maurer was attempting to produce an "Armco" iron in the Mineralogical Institute in Hettstedt. However, the iron still contained 0.25% copper, much more than the 0.05% maximum allowed.

5. Hettstedt was now producing iron - carbonyl powder, and was delivering it to Hescho(7) for further treatment.

6. Hettstedt would be able to supply the Nickel-E (Einbau) required in the manufacture of tubes. Three tons would be required for the whole of the Russian Zone in 1951. Hettstedt was also rolling and drawing the Nickel-A required in the manufacture of cathodes. This was being produced in Auerhammer (8), where a hydrogen furnace and vacuum smeltery with a capacity of 15 kg per diem (one charge per diem) had started operating.

7. Dr. Schiering of the Supplies Department of the Planning Ministry(9) announced that 1,000 tons of scheelite had been ordered from China.

8. The Werk HF and Erfurt were instructed not to make any more tubes of types A and C. In future only Phonetika-Radio was to make these types of tubes.

9. It was decided to test packing methods in a practical way by each firm shipping by rail to one of the other firms several crates of tubes, which the second firm would return by rail to the original firm for testing. However, not one of the crates had completed the round trip at the time of the meeting on 21 June, because of the slowness of the authorities in issuing the necessary permits for the return journeys of the crates.

Meeting on 21 June.

10. The proceedings were opened with an address by a representative of the Berliner Glühlampenwerk on the production of tungsten wire.

11. Werk HF reported that rejection figures lay between 10.5% and 50% (on the P.50 television tube) for the various types of tubes produced in May. Phonetika (now known as "Stern-Radio", Berlin-Weissensee) reported the figures of 27% (AJ 4), 57% (AF.7), 30% (AL.4) and 19% (CL.4). All factories reported that the quality of the glass used in the tubes had deteriorated considerably. Another cause of poor quality tubes was the extremely variable nature of the town gas supply.

12. The Erfurt factory reported that they were now independent of imports of Fe-strip (FE-Bänder) and Nickel-plated strip because Fe-strip of a satisfactory quality was now produced in the DDR. Blank Fe-strip was, in addition, galvanized or treated cataphoretically (sic). Dr. (fnu) Heintze was experimenting with aluminium plating. Neuhaus had tried rubbing in aluminum powder and conversion in a high vacuum (sic) and had had good results, but the process was expensive.

1. [redacted] Comment: Unit of pressure not specified; however, it appears to be mm. of Hg. (Mercury).

2. [redacted] Comment: Unit of time not specified. 50X1-HUM

3. [redacted] Comment: Possibly Telefunken Radio factory, Erfurt.

4. [redacted] Comment: Work für Fernmeldewesen "HF" (Oberspreewerk), Berlin.

5. [redacted] Comment: Possibly Telefunken Radio factory, Neuhaus.

6. [redacted] Comment: Probably SAG Marten, Walzwerk für Buntmetalle, Hettstedt.

7. [redacted] Comment: Hescho Keramikwerk, Hermsdorf. 50X1-HUM

8. [redacted] Comment: Not further identified.

9. [redacted] Comment: State Planning Commission.